



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,614	10/19/2000	Jean-Francois Grimaldi	Q61365	2115

7590 10/05/2004
Sughrue Mion Zinn
Macpeak & Seas
2100 Pennsylvania Avenue NW
Washington, DC 20037-3213

EXAMINER

NGUYEN, PHUONGCHI T

ART UNIT	PAPER NUMBER
----------	--------------

2833

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action SummaryApplication No. **09/673,614**

Applicant(s)

GRIMALDI ET AL.

Examiner

Phuongchi Nguyen

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 06/28/04 (RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 12 and 13 is/are allowed.
- 6) ☒ Claim(s) 1-7, 10 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 8 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

☒ *Attachments (3 pages)*

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The request filed on June 28, 2004 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/673,614 is acceptable and a RCE has been established.
2. Applicant's amendment of June 28, 2004 is acknowledged. It is noted that claims 1, 5 and 14 are amended.
3. Claim 2 is canceled from the previous office action. However, the limitation of claim 2 is recited in claim 1. Claim 2 cannot be examined on the merit.

Claim Rejections - 35 USC § 112

4. The claims rejected under 35 U.S.C. 112, first paragraph as failing to comply with the description requirement thereof since "(first and second braches) which are formed parallel to each other" in claims 1, 5 and 14, lines 3, 6 and 3, respectively, introduces new matter not supported by the original disclosure. The original disclosure does not reasonably convey to a designer of ordinary skill in the art that applicant was in possession of the design now claimed at the time the application was filed. See *In re Daniels*, 144 F.3d 1452, 46 USPQ2d 1788 (Fed. Cir. 1998); *In re Rasmussen*, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981). Specifically, there is no support in the drawings. Therefore, this limitation can not be examined on the merit.

Claim Rejections - 35 USC # 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless (e) ne invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. Claims 1, 3-5, 7 and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by

Art Unit: 2833

W. H. McKee (US3115379).

In regard to claim 1, W. H. McKee discloses (attachment 1) a spring contact (15) for use in a connector, which spring contact (15) is substantially U-shaped and has two branches (20', 21') and a base (13) joining the first and second branches (20', 21') at one end for forming a U-shape, and wherein each of the first and second branches (20', 21') complete an electrical circuit with a device (contact at 1 inside a device), characterized in that the first and second branches (20', 21') lie in two diverging planes where the branches (20', 21') connect to the base (13). The intersection (A) of the two planes (20', 21') is within the base (13) of the U-shape, and the first branch (portion B of 20) and the base (13) are coplanar and where the first and second branches (20', 21') are formed integrally with the base (13).

In regard to claim 3, W. H. McKee discloses (attachment 1) the spring contact (15) characterized in that the electrical contact of at least one branch (20' or 21') is made at the free end (C) of the branch (20' or 21').

In regard to claim 1, W. H. McKee discloses (attachment 2) a spring contact (15) for use in a connector, which spring contact (15) is substantially U-shaped and has two branches (20', 16) and a base (13) joining the first and second branches (20', 16) at one end for forming a U-shape, and wherein each of the first and second branches (20', 16) complete an electrical circuit with a device (contact at 1 inside a device), characterized in that the first and second branches (20', 16) lie in two diverging planes where the branches (20', 16) connect to the base (13). The intersection (A) of the two planes (20', 16) is within the base (13) of the U-shape, and the first branch (portion B of 20) and the base (13) are coplanar and where the first and second branches (20', 16) are formed integrally with the base (13).

In regard to claim 3, W. H. McKee discloses (attachment 2) the spring contact (15) characterized in that the electrical contact of at least one branch (20' or 16) is made at the free end (C) of the branch (20' or 16).

In regard to claim 4, W. H. McKee discloses (attachment 2) the spring contact (15) characterized in that one of the first and second branches (16) is adapted to come into contact with a printed circuit (25) and the other of the first and second branches (20) is adapted to come into contact with a battery; The shape of the contacts allows contact with theses devices. They are therefore seen to be adapted to do so.

In regard to claim 5, W. H. McKee further discloses (attachment 2) an electrical connector comprising a first face (where 20' located) and a second face (where 16 located) opposite the first face (where 20' located), and at least one housing (Column 3, lines 66) for receiving a spring contact (15) and opening onto both of thi first and second faces (where 20' and 16 located), wherein the spring contact (15) is positioned in the housing so that a plane containing a base (13) of the U-shape is substantially parallel to the respective planes of the faces (where 16 located) of the connector.

In regard to claim 7, W. H. McKee discloses (attachment 2) the connector further comprising a retainer (housing, Column 3, lines 66) for retaining the spring contact (15) in the housing.

In regard to claim 14, in further limit of claim 1 based on attachment 2, W. H. McKee discloses (attachment 2) the first branches (20') make electrical contact with a first device (contact at 1 of the device), and the second branches (16) make electrical contact with a second device (circuit board) (figure 15).

Art Unit: 2833

In regard to claim 15, W. H. McKee discloses (attachment 2) the connector characterized in that the electrical contact (15) of at least one branch (20') is made at the free end (C) of the branch (20.).

In regard to claim 16, W. H. McKee discloses (attachment 2) the spring contact (15) characterized in that the second branches (16) is a printed circuit (figure; 15) and the first branches (20') is a battery; The shape of the contacts allows contact with theses devices. They are therefore seen to be adapted to do so.

7. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Gettig et al (US4, 963,102).

In regard to claim 1, Gettig et al discloses (attachment 3) a spring contact (T) for use in a connector, which spring contact (T) is substantially U-shaped and has two branches (54, 70) and a base (A) joining the first and second branches (54, 70) at one end for forming a U-shape, and wherein each of the first and second branches (54, 70) complete an electrical circuit with a device (contact to mating contact), characterized in that the first and second branches (54, 70) lie in two diverging planes where the branches (54, 70) connect to the base (A). The intersection of the two planes is within the base (A) of the U-shape, and the first branch (54) and the base (A) are coplanar, and where the first and second branches (54, 70) are formed integrally with the base (A).

In regard to claim 3, Gettig et al discloses (attachment 3) the spring contact (T) characterized in that the electrical contact of at least one branch (54) is made at the free end (56) of the branch (54).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 6-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over W. H. Mckee (US3115379) in view of Derr (US4548457).

In regard to claim 6, W. H. Mckee discloses the invention, but lacks a guide to guide the spring contact into position in the housing. However, Derr teaches (figures 1 and 3) the connector (12) further comprising a guide (at the bore 18) to guide the spring contact (26) into position in the housing (12). It would have been obvious to one having ordinary skill at the time the invention was made to modify the housing of W.H.Mckee by providing a guide as taught by Derr for ease inserting the contact into the housing.

In regard to claim 7, W. H. Mckee discloses the invention, but lacks a retainer. However, Derr teaches (figure 2) the connector (12) further comprising a retainer (14) for retaining the spring contact (T) in the housing (12). It would have been obvious to one having ordinary skill at the time the invention was made to modify the housing of W.H.Mckee by having a retainer as taught by Derr for enlarging the housing of the connector.

In regard to claim 10, W. H. Mckee discloses the invention, but lacks a pick-up area. However, Derr teaches (figure 2) the connector characterized in that one face (at 60, 62) of the connector has a pick-up area (at surfaces 60, 62) substantially at the center of a top face (at surface 60). It would have been obvious to one having ordinary skill at the time the invention

Art Unit: 2833

was made to modify the housing of W.H.McKee by providing a pick-up area as taught by Derr on the housing for ease to hold or carry during assembly.

Allowable Subject Matter

10. Claims 9, 12, 13 are allowed.

11. Claims 8 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: In regard to claims 8 and 11, the prior art fails to teach the connector characterized in that one branch of the spring contact projects from the housing.

Response to Arguments

13. Applicant's argument of the inherency of "the housing of McKee" in the claims should be necessarily presented, this is not deemed persuasive. The housing of McKee is not shown the drawings, however, the housing of McKee is disclosed in the specification of McKee at Column 3, lines 65-67.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchi Nguyen whose telephone number is (571) 272-2012.

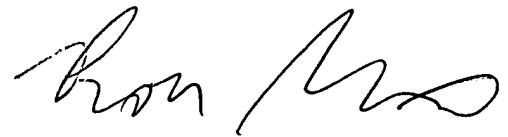
The examiner can normally be reached on 8:00AM-4:00PM.

Art Unit: 2833

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PCN
September 21, 2004



ROSS GUSHI
PRIMARY EXAMINER